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- 13. The method of claim 10, wherein said correlating the signal sequence received with one or more known training sequences further comprises determining a correlation quality of at least one of the one or more received beam signals.
- 14. The method of claim 13, wherein the correlation quality for each of at least one of the one or more received beam signals is a measure of the best, or nearly the best, correlation determined for that beam signal.
 - 15. The method of claim 10, further comprising: receiving signaling information; and
 - selecting the one or more known training sequences based on the received signaling information; and
 - wherein said correlating the signal sequences received with one or more known training sequences further comprises correlating the signal sequence received with the 15 selected one or more known training sequences.
- **16**. The method of claim **15**, wherein the signaling information is received from a signaling information monitoring module.
- 17. The method of claim 15, wherein the signaling information is received from an interface.
 - 18. An apparatus, comprising:
 - a receiving system configured to receive signals via one or more beam signals, wherein the signals received include a signal sequence, wherein the beam signals are formed 25 from at least one input signal received at a smart antenna array and formed at a beam forming network;
 - a correlation circuit configured to correlate the signal sequence received with one or more known training sequences; and
 - a beam selection circuit configured to select one or more of the one or more beam signals for transmitting based at least in part on one or more parameters, wherein the one or more

parameters include the one or more correlation qualities. 35

- 19. The apparatus of claim 18, wherein the one or more parameters further comprise the signal strength of at least some of the one or more beam signals.
- **20**. The apparatus of claim **18**, wherein the beam selection module is capable of determining a quality factor for at least 40 some of the one or more beam signals.
 - 21. A method comprising:

receiving signals at a smart antenna apparatus via one or more beam signals, wherein the one or more beams are 46

formed at a beam forming network from input signals received at a smart antenna apparatus;

selecting from the one or more beam signals a first beam signal for communicating uplink signals; and

selecting from the one or more beam signals a second beam signal for communicating downlink signals, wherein the first beam signal and second beam signal are different beam signals.

22. An apparatus comprising:

- a receiving system configured to receive signals via one or more beam signals, wherein the beam signals are formed by a beam forming network from input signals received at a smart antenna array;
- a processing system configured to:
 - select a first beam signal for communicating uplink signals from the one or more beam signals; and
 - select a second beam signal for communicating downlink signals from the one or more beam signals, wherein the first beam signal and second beam signal are different beam signals.

23. A system, comprising:

- a smart antenna array, comprising one or more antenna elements, wherein each antenna element is configured to receive one or more input signals radiated from one or more mobile stations;
- a beam forming network, configured to form one or more uplink beam signals from the input one or more signals received at the antenna unit;
- a smart antenna apparatus, comprising:
 - (a) one or more receivers, configured to receive the one or more uplink beam signals,
 - (b) one or more beam analysis modules, configured to determine one or more uplink beam characteristics of the one or more uplink beam signals, and
 - (c) one or more beam selection modules, configure to select at least one uplink beam signal from the one or more uplink beam signals, wherein the at least one uplink beam signal is selected based, at least in part, on the determined one or more uplink beam characteristics; and
- a base station transceiver, configured to receive the selected at least one uplink beam signal.

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